

Work Order ID 131645

Monday, April 20, 2015 4:10:11 PM

131645

Ship stay

Page 1

Item ID: D2724-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: 206L Step Assembly, LH
 Start Date: 4/20/2015 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 5/8/2015 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: *ME* Date: *5-4-20* Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2724	Rev C								

100		0.00							
100	Large Fab								
Large Fab	Memo	0.00							
Large Fab	Cut D2724-1 using D2622 extrusion as per Dwg D2724 Deburr and bevel ends for welding								
									<i>DP 15-11-3</i>
110		0.00							
110	Large Fab								
Large Fab	Memo	0.00							
Large Fab	Weld end cap (One End Only) and lugs as per Dwg D2724 using Jig DT10063								
	A/R AL ROD Batch: <i>M132917 / M131562</i>								
	Grind end cap welds flush								
120		0.00							
120	QC9- Inspect visual per QSI004- Fusion Welds								
QC	Memo	0.00							
Quality Control									
									<i>2 8 BE15-11-04</i>
									<i>2 15-11-1</i>

DAS
50
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Page 2

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: 206L Step Assembly, LH

Stop *NS2*

Start Date: 4/20/2015 **Start Qty:** 4.00 ***4***

Cust Item ID:

Required Date: 5/8/2015 **Req'd Qty: 4.00** ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

[illegible]

DQA: _____ Date: _____



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Misidentified ☐	Past Due ☐																								

Work Order ID 131645

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Page 4

Item ID: D2724-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: 206L Step Assembly, LH
Start Date: 4/20/2015 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 5/8/2015 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Chemical Conversion Coat per QSI005 4.1	0.00							
190									
HandFinish	Memo	0.00							
Hand Finishing									
200	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
200	<i>m 183454.</i>								
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <i>7:55</i> OVEN TEMPERATURE: <i>325°</i> FINISH TIME: <i>8:25.</i>								
210	QC3- Inspect Part Finish	0.00							
210									
QC	Memo	0.00							
Quality Control									

2 15-11-4. DAS 34 9-89

2 15-11-5. DAS 34 9-89

x224 d 15/11/05 DAS 15 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Work Order ID 131645

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Required Date: 5/8/2015 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 *220* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <u>M133056</u> Memo	0.00				<u>Y26H</u>	<u>d</u>	<u>all</u>	<u>4/21/15</u>
230 *230* QC Quality Control	QC3- Inspect Part Finish Memo	0.00				<u>(2)</u>			DAS 38 9-89 NOV 05 2015
240 *240* Packaging Packaging	Identify as per dwg & Stock Location: PKG <u>PKG</u> Memo	0.00 <u>PKD 124316</u> 0.00				<u>2</u>		DAS 6 9-89	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																	
Description Work Order Deviation			Disposition																		
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			QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																			
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OTHER :																					

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Item ID: D2724-041 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: 206L Step Assembly, LH
Start Date: 4/20/2015 Start Qty: 4.00 *4* Cust Item ID:
Required Date: 5/8/2015 Req'd Qty: 4.00 *4* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	QC21 - Final Inspection - Work Order Release	0.00							
250									
QC	Memo	0.00							
Quality Control									

ML5 NOV 09 2015

ML5 NOV 09 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
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Work Order ID: 131645

131645

Parent Item: D2724-041

D2724-041

Parent Item Name: 206L Step Assembly, LH

Start Date: 4/20/2015

Required Date: 5/8/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:E As Per Ecn 766 06-01-06 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2622-120C

Manufactured No

100

Each

151.9200

1

4

D2622-120C

Step Extrusion

**

Location

Loc Qty

Loc Code

WA003

151.92

125381

25.92

130161

126

D2734

Manufactured No

110

Each

89.0000

D2734

Step End Plate

**

Location

Loc Qty

Loc Code

WA003

89

130457

29

130983

60

D2734

Manufactured No

160

Each

89.0000

D2734

Step End Plate

**

Location

Loc Qty

Loc Code

WA003

89

130457

29

130983

60

136182

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Page 2

Work Order ID: 131645

Parent Item: D2724-041

Parent Item Name: 206L Step Assembly, LH

131645

D2724-041

Start Date: 4/20/2015

Required Date: 5/8/2015

Start Qty: 4.00

Required Qty: 4.00

D3458-1

D3458-1

Step Mounting Plate

Manufactured No

110 Each 31.0000 2 8

BE 15-11-03

Location

Loc Qty

Loc Code

WA003

10

120233

8

122211

2

WA004

21

130460

21

D3458-3

D3458-3

Step Mounting Plate

Manufactured No

110 Each 21.0000 2 8

BE 15-11-03

Location

Loc Qty

Loc Code

WA003

4

121670

2

122212

2

WA004

17

130461

17

B 135243 x4

DQA: _____ Date: _____



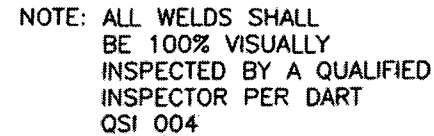
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

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— REFER TO STEP
END DETAIL

D2724-1
MAKE FROM EXTRUSION D2622-107

D2724-041 LH STEP ASSEMBLY (SHOWN)
D2724-042 RH STEP ASSEMBLY (OPPOSITE)

ROUND CORNER OF EXTRUSION TO
MATCH BEND RADIUS OF END PLATE

QTY - 041	QTY - 042	PART NUMBER	DESCRIPTION
X		D2724-041	LH STEP ASSEMBLY
	X	D2724-042	RH STEP ASSEMBLY
1	1	D2622-107	EXTRUSION
2	2	D2734	END PLATE
2	2	D3458-1	PLATE
2	2	D3458-3	PLATE

UNDER REVIEW

14.12.10 AJS

D2734 END PLATE

TYPICAL STEP END DETAIL
NOT TO SCALE

D2724-041/-042 STEP ASSEMBLY

- 1) MAKE FROM EXTRUSION D2622 TYPICAL S
2) WELD PER DART QSI 004 NOT
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
4) ALL DIMENSIONS ARE IN INCHES
5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DART

DESIGN	KE	DRAWN BY	PH	DART AEROSPACE USA, INC.	
CHECKED		APPROVED		DRAWING NO.	D2724
DATE	05.09.19	TITLE	206L/407 STEP ASSEMBLY		
A	97.12.04	NEW ISSUE	REV. C	SHEET 1 OF 1	SCALE
B	98.10.19	UPDATED WELD DETAIL REVISED TOLERANCES	NTS		
C	05.09.19	RE-DESIGN, ADD D3458-1/-3			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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